DAVID DATE, JR. and ELLIOT HANDLER, Individually and On Behalf of All Others Similarly Situated, Plaintiffs

Vs.

Sony Electronics, Inc. and ABC Appliance, Inc., d/b/a ABC Warehouse, Defendants

United States District Court Eastern District of Michigan Southern Division Case # 07-CV15474

Expert Report of Rick Souder

February 11, 2011

Background

I have been retained to provide expert opinion in the above captioned case. I have been asked to outline the process and resources consumers use to research and purchase consumer electronics. I have been asked to relate these processes to the specific claims made about the 1080p capabilities of specific models of Sony TV's available in the United States from late-2004 into early-2006.

Summary of my qualifications

I have 35 years of retail management experience ranging from managing stores for the Gap to heading the merchandising efforts for significant consumer electronics retailers. Most relevant to the topic at hand is my time spent in the Merchandising departments of Circuit City Stores and Crutchfield Corporation.

I was named National Buyer for TV at Circuit City in 1988. Circuit City was a leading national chain of consumer electronics stores. As National Buyer I was responsible for the merchandising, selling and advertising strategies for the TV business. Circuit City became the largest retailer of televisions in the United States during my tenure. I worked with all the major TV suppliers to decide which TV's Circuit City would carry, how they would be advertised and the dissemination of training materials to the stores. Over the years I added direct and supervisory responsibility for other product categories and was named General Merchandise Manager for all of Circuit City's Audio and Video businesses in 1999. These businesses represented about \$5 billion in annual sales from 600 stores and delivered the majority of Circuit City's profits. The launch of Digital TV was a significant focus during the latter part of my tenure at Circuit City. We spent many hours developing appropriate ways to explain the coming technologies to consumers, create appropriate displays and signing in the stores and advertisements and train several thousand sales people.

In 2003 I became Executive Vice President of Merchandising for Crutchfield Corporation. Crutchfield is a leading catalog and internet retailer of consumer electronics established in 1976. Crutchfield is widely recognized as a leading source of reputable information on consumer electronics. Many in the industry use the well-known

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Crutchfield catalog as their base reference for consumer-focused product information. I also have responsibility for the content of Crutchfield's award winning website where very detailed in-depth information is presented to help consumers choose and use their electronics purchases.

I am a Board member of the Progressive Retailers Organization (PROGroup) which is a member-owned affiliation of 17 consumer electronics specialty retailers. PROGroup retailers are focused on providing extra information and services to help their customers make informed purchasing decisions. The PROGroup aggregates the \$1.7 billion sales of the members to negotiate purchasing agreements with major consumer electronics suppliers.

Materials upon which this report is based

I have examined the Plainiffs' Motion for Class Certification Against Defendant Sony Electronics, Inc, as well as the Exhibits filed with that motion. I have reviewed information on the subject televisions on Sony's website (www.sonystyle.com), the Crutchfield website archives, the online AVS Forum (www.avsforum.com), and various consumer-oriented electronics magazines. I have reviewed information about consumer behavior and the shopping process for consumer electronics from the Consumer Electronics Association (CEA) and TWICE Magazine, a leading trade publication.

Overview of the TV Shopping Process

Consumers purchase TV's for different needs around their homes and their shopping behavior varies accordingly. Someone looking to place a small-screen TV in a secondary location in their home such as a garage or child's bedroom may make a quick decision about what to buy based on price or impulse. However, a large-screen TV destined for prime placement in a family room or home theater is a much more considered purchase. Consumers usually spend significant time researching various models and educating themselves about various terms and technologies. This has become even more common as the internet has made side-by-side comparisons of the features and specifications of multiple products from multiple brands and multiple retailers much easier.

Consumers have many sources of information about televisions. Although they may not have been as ubiquitous as today, all of the following sources were well-established when the subject televisions were in the market:

- Retailers' and manufacturers' print advertisements, catalogs and brochures
- Retailers' and manufacturers websites
- Independent websites and publications such as CNET or Consumer Reports
- Enthusiast online forums
- Enthusiast magazines
- Consumer discussions and forums on retailers' websites
- Consumer product reviews on retailers' and independent websites
- Word-of-mouth from other consumers
- Retail salespeople

Consumers use many sources of information to inform their decisions. The Consumer Electronics Association (CEA) surveyed 1000 U.S adults in August 2008 to prepare their

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"Trends in CE Retailing" report. While this report is several years after the subject televisions were in the market, many of these trends were already significant in late 2005 and early 2006. According to the CEA study:

- 69% of CE buyers did research on-line and then purchased in a store
- 76% of CE buyers said they were using more sources and/or spending more time researching purchases than before.

Even after all this research the majority of consumers choose their TV because it has a "Good Picture" or the "Best Picture". TWICE Magazine on 6/20/2005 reported on a study which examined the consumer's decision-making process for buying TV's. According to the study by ChannelEdge, "...the majority of people interviewed after a purchase chose picture quality as the most important factor in their decision...Price, size and warranty followed." A similar study by iSuppli was reported in the 9/10/2008 issue of TWICE. According to TWICE, iSuppli's principal TV analyst said, "...picture quality is difficult to quantify, and that consumers are judging the criteria on their own perception in front of the screen, rather than relying on spec numbers." While these articles are several years apart, the themes they highlight are similar to various studies I have read over many years.

Retailers and manufacturers often focus their marketing materials on the technologies or features of their TV's but the customer's choice almost always comes down to picture quality. In fact, manufacturers adjust their sets at the factory to look good in the bright lights of retail stores even though these may not be the best settings when the customer gets the TV home. Marketing materials are often designed to give the customer support and to make them feel good about their purchase. You can often see customers boast online that they bought Model X that has a great picture because of technology X even though they would be hard-pressed to explain technology X.

Different consumers have different levels of understanding and engagement with TV technologies. There is a small group of enthusiasts who want to know and debate every feature and technical detail of various products. This is their hobby. These enthusiasts read the enthusiast magazines (Sound and Vision, Stereo Review, etc.) and read the enthusiast forums (www.avsforum.com). While these magazines and websites are authoritative, they have fairly low readership. Most consumers have much less knowledge of the details of the products they buy and much less interest in spending a lot of time learning all the details than these enthusiasts. While they research their purchases they are generally looking for enough information to give them comfort that they made a good decision rather than researching all the technical details of the products.

Sony Qualia and XBR TV's

In late 2004 Sony began introducing their new flagship television models under the highend XBR and Qualia badges. Qualia was a relatively new designation for Sony focused on the high-end custom installation market. There was little, if any advertising about Qualia products. Sony relied on the recommendation of high-end custom installers to recommend these products for their demanding customers. "XBR" was a designation Sony had applied to their best-performing TV's since at least 1988. The designation (or "badge" or "sub-brand") was limited to a few models each year that incorporated Sony's best technologies, features and performance. These TV's were generally recognized as among the very best in the industry by industry insiders. Retailers often positioned these

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TV's as "Sony's Best" to establish performance expectations and value for these products. These were the first consumer TV's based on a new technology called LCOS (Liquid Crystal on Silicon). Sony marketed this technology as SXRD and it was widely anticipated by electronics enthusiasts for the picture quality it delivered.

There was also a growing awareness of the upcoming but uncertain transition to digital television broadcasting in the United States. HDTV was a fairly common buzzword. According to a CEA study in March 2005, 90% of adults were aware of at least one term used to refer to high-definition TV. At the same time there was much confusion over the details. There were multiple standards for TV displays, broadcast signals, input devices and connections between devices. Unless a consumer was one of the relatively few people reading the enthusiast publications, they were unlikely to be aware of all the differences and debates.

The SONY XBR1 and Qualia TV's could display a 1080p signal. The antenna input on these TV's was capable of accepting a 1080p signal should any broadcaster choose to transmit one. The HDMI connection(s) on these TV's could not pass a 1080p signal. If a 1080p source was connected to the TV via HDMI, the signal would pass between the devices as 1080i and then be upconverted to display as 1080p in the television. While I acknowledge that this was important to a small group of consumers, I submit that this was immaterial to most consumers. I submit there was ample information available to those consumers who cared to make an informed decision about the issue.

Advertising

I have reviewed the advertisements submitted by Plaintiffs as Exhibits A and B. I have also examined ads that are part of the Exhibits to the Fawcett declaration.

Plaintiffs' Exhibit B appears to be a brochure for the Qualia line of TV's from Sony. I did not have direct experience with that line. It was designed to be sold by a small group of high-end dealers who specialize in custom installation. This brochure would not have been in wide circulation and would likely have been handed out as part of a consultation by one of these dealers. These TV's had very little visibility in the market.

The advertisements in Plaintiffs' Exhibit A and the Exhibits to the Fawcett Declaration are a valid representation of the advertising typically done by the large national CE retailers such as Best Buy, Circuit City, Comp USA and Sears. I estimate each of these ads would have been circulated in approximately 30 million newspapers each week. They are usually ignored unless the consumer is in the market for a given product when they receive the newspaper.

The ads highlight a few features of each product and give varying emphasis to different features. The term "1080p" varies in prominence in the ads. It is used as part of the basic description of the TV in 13 of the ads. The term is highlighted in a more prominent position in 5 of the ads. It is not mentioned at all in 18 of the ads.

Some retailers varied the features they called out from week to week. This is a common practice. Different features appeal to different consumers. Therefore retailers vary the emphasis they put on different features to appeal to those different customers. They do not want to put all their effort into just one feature since it might limit their audience. An

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ad must provide enough basic information (screen size, type of TV, etc.) to identify the product and then the sales puffery takes over when different features are mentioned or highlighted. If mentioned at all, 1080p was usually one of multiple features mentioned and only rarely emphasized more than other features.

As mentioned above, SXRD was a new technology that was widely anticipated. Accordingly, retailers gave prominence to SXRD more often than they gave prominence to 1080p in the ads I reviewed. Retailers highlight the features they believe are most salient and most likely to motivate the customer to take action. Based on this sample of ads, the retailers felt SXRD was worth a bigger splash than 1080p.

Retailer's ads are designed to get people to come to the retailer's store more than to sell any one product. The whole goal is to get a consumer in your store so you can determine their needs and find the product they want, whether it was the one advertised or not. These ads are not designed to be the only, or even main, source of information for the customer. At some point, the overwhelming majority of consumers go to a retail store before they purchase their TV. In the store they see dozens of TV's in multiple sizes. In general, they narrow their choices by the picture they see and the price of the various models. Features and technology are usually discussed to support the consumers choice — to give them confidence they made a good decision but rarely drive the purchase. As outlined above, few customers make their choice on features and technology — they make their choice on picture quality and price.

As mentioned above, there was much uncertainty over the variations of HDTV at the time the subject televisions were in the market. There were 18 broadcast standards approved for digital TV by the FCC – three of these were considered high-definition. There were rumors and debates about the resolution capabilities of upcoming devices such as BluRay, HD-DVD and high-end game consoles. There was confusion between the capabilities of a TV screen to reproduce a signal and the capabilities of an input to accept the signal. There were evolving standards for HDMI inputs.

These issues were of interest in the narrowly circulated enthusiast magazines and websites but did not seem to be on the radar of the mainstream consumer. Most people bought there TV's in a retail store after seeing the picture and considering the price. In my experience, most consumers would not have been aware of the subtleties between display capabilities and input capabilities.

The ads in the exhibits were accurate – these TV's did display a picture consisting of 1080 lines progressively scanned. These TV's took whatever source they were fed and upscaled it to 1080p. I don't believe that most consumers would have assumed that a "1080p" television had a 1080p input. I don't believe there was an awareness of the topic with most consumers. If the issue was important to most consumers, the large mass retailers such as Circuit City and Best Buy would have addressed it to help their customers.

Interest in 1080p

I believe 1080p was only important to a very small subset of customers and these customers were the ones most likely to understand what they were buying. 1080p sources are common today in BluRay players and gaming consoles. But awareness of 1080p was

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very low and 1080p sources were non-existent when these TV's were in the market in 2005 and 2006. BluRay had not yet been launched and its competitor (HD-DVD) only supported 1080i. I don't believe 1080p was high on most consumers' wish list.

The group that a technology like 1080p would appeal to are the same enthusiasts involved in various online technology forums. The most notable forum for these topics is www.avsforum.com. I searched their archives and found very few discussions about 1080p. There were a few questions from consumers trying to sort out the issues between 1080p sources, inputs and displays but it was not a common topic. There were many more posts and discussions about the new, exciting SXRD technology. That seems to be what got the enthusiasts excited – much more so than 1080p.

Not all the ads in the Exhibits mentioned 1080p. However, all the ads mentioned or featured SXRD and often touted it as the reason for the great picture on these TV's. SXRD also captured the imagination of the enthusiasts. It was discussed in every publication in the Exhibits I reviewed. One writer for The Perfect Vision magazine (May/June 2005) enthused that "few technological developments have stirred up the anticipation and unadulterated lust that Sony's SXRD technology has."

If someone was interested in the details of 1080p they could find out the necessary information in a number of places. Sony's owner's manual for the 50XBR1 and 60XBR1 did not list 1080p as one of the resolutions accepted by the HDMI input. The AVS Forum made the distinction between the capabilities of the display and the capabilities of the input. The enthusiast magazines included information on the topic.

Since 1080p was such a technical feature, I believe the subtleties of it were only important to a small group of consumers. In my experience, the people who were concerned about a feature like1080p were the most likely to make extensive use of the research tools available and the most likely to understand the technicalities of what they were buying.

Based on a small sample, 1080p was not a concern for consumers who bought one of the TV's and posted a review on the Crutchfield website. The 29 customer reviews on crutchfield.com gave the TV's very high ratings – most gave it the highest, 5-star rating. A few reviews marked it down for a specific quality issue. Most raved about the picture quality and focused on SXRD as "the best (picture) out there". Only two of the 29 reviews mentioned 1080p. One gave it 5-stars and attributed the "excellent, excellent, excellent" picture to 1080p. The other comment was by an apparently well-informed consumer who understood the issues and suggested he would probably wait to buy a set with inputs capable of handling 1080p.

Establishing value in TV's

Manufacturers develop their TV product lines to satisfy the needs of multiple customers. Some customers only want a basic, high-quality set with no frills. Others want a specific technology such as internet connectivity or feature such as an illuminated remote control. Some consumers want the very "best" even if they don't know exactly what makes it the best. So manufacturers develop a "line strategy" that consists of various products to address various needs. Their line generally starts with a basic product and then adds features or technologies in a number of progressively more expensive "steps".

The consumer looks at the difference between one step and another in the line and decides if the product is worth the extra money they will have to spend. For some it is, for some it isn't. As the customer moves up in the line they rarely only get one additional feature or technology for their "step". The manufacturers almost always package a series of extra features or technologies as you step up their line. For years, the biggest step in Sony's line was the last jump up to XBR. XBR was widely recognized as Sony's best for that particular point in time. As technology progressed each year, the particular features that made XBR the best varied. However the step between the best regular Sony TV and the premier XBR line carried a similar price premium.

This is an important concept and sheds light on the price consumers are willing to pay for various features and technologies. It is helpful to compare Sony's model lineup from 2004/2005 to the 2005/2006 line that contained the subject TV's. I will compare the differences in 60" TV's since there was no 50" XBR model before the 50XBR1 in 2005. In 2004/2005, the top-of-the-line regular Sony model (KDF60WF655) sold for \$3699. The step-up XBR model (KDF60XBR950) added a few minor convenience features for \$4999. There were no significant picture enhancement features in the XBR product despite the \$1300 premium.

In early 2006, the top-of-the-line regular Sony model (KDFE60A20) sold for \$3299. The step-up XBR model sold for \$4499. For \$1200 the customer received a major picture upgrade with the SXRD technology, a better sound system and a number of worthwhile picture enhancement and convenience features. The 2005/2006 XBR product added more features and more performance for a lesser premium than the previous year.

I believe most customers usually make their decision to buy a more expensive product based on the combination of features or technologies that are added. It is rare that they focus on just one feature or technology. Indeed, manufacturers construct their lines so they don't have to focus on only one feature. By this measure there were significantly more reasons to step-up to XBR in the 2005/2006 line than the previous year. While 1080p may have been important to some customers, they were many more reasons to trade up in the 2005/2006 line than the previous year. The biggest reason was the SXRD technology and the resulting picture consumers saw in retail stores.

Summary

Consumers choose TV's largely on the basis of a subjective evaluation of picture quality and price in a retail store. Retail advertising is designed to motivate the customer to go to a specific store to make those judgments and buy from a specific retailer. Retail ads are often filled with puffery and buzzwords to excite the customer. Ads are not designed to be the ultimate source of product information for the customer. Whether or not they have seen a retail ad, the majority of customers research their purchases online and some read various enthusiast publications.

There were many opportunities for consumers to learn about the differences between a TV that can display 1080p and ones that can accept a 1080p input. Even though this information was available, it did not seem to concern many consumers. It was not frequently discussed in online forums. It was not a significant issue in an admittedly small sample of customer product reviews. I believe the 1080p issue was unimportant to

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most consumers. I believe any enthusiasts who might be concerned about the issue had ample opportunity to learn about the details and made their purchase decisions accordingly.

There was much confusion over various surrounding HDTV and related terms when these TV's were in the market. There was a lot of debate among retailers as how to describe and position HDTV's with the consumer. Consumers had various levels of understanding of the term "1080p". For some it was important, for most it was one of a number of features packaged into Sony's XBR and Qualia TV's. The 2005/2006 generation of XBR TV's carried a lesser price premium than the previous generation of XBR TV's. These products represented Sony's best technology which alone is significant motivation for many consumers to buy these televisions.

Cases in which I have provided expert testimony in the past.

I have never provided expert testimony in any litigation.

Compensation

My reimbursement is \$350 per hour.

Respectfully submitted,

Rick Souder

February 11, 2011